

Recovery Plan Action Status

Plan Name: New Mexico Ridge-nosed Rattlesnake

Plan Status: Final

Plan Date: 22-Mar-85

Lead Agency: USFWS

Lead Office: Arizona Ecological Services Field Office

(602)

242-0210)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	2	1	New Mexico Wildlife Conservation Act and its Regulations	Ongoing Current	Prior to FY 1995	Prior to FY 1995	New Mexico Department of Game and Fish	Other: Regulations	Labor type not yet selected	NM listed the NMRR as Endangered under WCA. It has been listed under WCA since 1/1975 and enforcement is ongoing. This is an ongoing activity.
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	10	Reproductive patterns	Ongoing Current	Prior to FY 1995		New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrolo Urbano y Ecologia	Research: Demographic Studies	Graduate Student	Holycross & Goldberg. 2001 Copeia (2):473-481 - provides information on reproduction of Crotalus willardi with some information on C.w. obscurus.
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	11	Other patterns	Not Started			New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrolo Urbano y Ecologia	Work type not yet selected	Labor type not yet selected	
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	12	Determine prey relationships & the availability of potential prey	Not Started			New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrolo Urbano y Ecologia	Work type not yet selected	Labor type not yet selected	Should be concurrently with 2.1, 2.2, & 2.3

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New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	13	Predation	Ongoing Current	FY 1995 - FY 1999		New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrolo Urbano y Ecologia	Research: General	Graduate Student	Note published on observation of avian predation Holycross et al. SW Nat 46(3):363-364
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	14	Disease	Not Started			New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrolo Urbano y Ecologia	Work type not yet selected	Labor type not yet selected	
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	15	Man's impact	Not Started			New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrolo Urbano y Ecologia	Work type not yet selected	Labor type not yet selected	
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	16	Related factors	Ongoing Current	FY 1995 - FY 1999		New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrolo Urbano y Ecologia	Research: Other Information	Graduate Student	Ongoing Animas - Adobe fire impacts to habitat were evaluated. Peloncillo - A prescribed fire and a wildfire use incident occurred in 2006, FS will evaluate and report on effects in accordance to the Peloncillo Programmatic FMP BO (2005). Smith et al. 2001. SW Nat 46(1):54-61.

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New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	17	Develop action plan	Ongoing Current	Prior to FY 1995		New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrollo Urbano y Ecologia	Management	Graduate Student	Ongoing reduction of threats through, Section 7 Consultation, Habitat Conservation Planning, Technical Assistance. FY 2007 the species 5-year review will be initiated.
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	18	Clarify the taxonomic status of ridgenosed rattlesnake populations in the Animas & San Luis Mountains	Ongoing Current	Prior to FY 1995		New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrollo Urbano y Ecologia	Research: Demographic Studies, Research: Taxonomic Studies	Graduate Student	Holycross and Douglas 2007 Biol Cons 134:142-154
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	19	Establish two or three captive populations	Not Started			New Mexico Department of Game and Fish, USFWS Regional Office 2, Management	Work type not yet selected	Labor type not yet selected	Gladys Porter Zoo, Brownsville, TX, & Rio Grande Zoo, Albuquerque, NM, are suggested locations for captive populations
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	2	2	Federal Endangered Species Act and its Regulations	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Law Enforcement Division, USFWS Regional Office 2, Management	Other: Regulations	Internal Technical Assistance	On going enforce of sections 7, 9, & 10. Coronado NF RMP amendment BO, Peloncillo FMP BO addressed effects to NMRR. Malpai Borderlands Group's draft HCP also includes NMRR as a covered species.
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	20	Local and State	Not Started			New Mexico Department of Game and Fish, USFWS Regional Office 2, Management	Work type not yet selected	Labor type not yet selected	
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	21	National	Not Started			New Mexico Department of Game and Fish, USFWS Regional Office 2, Management	Work type not yet selected	Labor type not yet selected	

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New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	22	Professional information	Ongoing Current	Prior to FY 1995		New Mexico Department of Game and Fish, USFWS Regional Office 2, Management	Other: Information and Education	Graduate Student, Species Expert	Several publications have come out of the State Agencies & Universities related to this species.
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	2	3	Establish cooperative agreement with landowners	Ongoing Current	FY 2000 - FY 2004		New Mexico Department of Game and Fish, Realty, USFWS Regional Office 2, Management	Management: Planning	Internal Technical Assistance	On going work with NMDGF and AZGFD. Malpai Borderlands Group included NMRR within their draft HCP. They included cool-season, fuel reduction burns as an optional activity in the NMRR habitat to aid in reducing threats from catastrophic wildfire. Expected decision on permit issuance in FY08.
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	4	Develop a joint U.S./Mexico Agreement to protect and study the species in Mexico	Ongoing Current	Prior to FY 1995		Bureau of Indian Affairs, USFWS Regional Office 2, Management	Management: Planning	Internal Administrative	Should be included in present U.S./Mexico agreement. Species was included on AESO priority list to the Trilateral Commission for bi-national conservation (May 2006)
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	5	Other alternatives	Ongoing Current	Prior to FY 1995		New Mexico Department of Game and Fish, Realty, USFWS Regional Office 2, Management	Management: Habitat Maintenance and Manipulation	Internal Administrative	No agreement has been reached, but cooperative management has continued on an informal basis.
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	6	Survey suitable habitats	Not Started			New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretaria de Desarrollo Urbano y Ecologia	Work type not yet selected	Labor type not yet selected	

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New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	7	Capture, mark, photograph, and/or radio tag and release ridgenosed rattlesnakes	Ongoing Current	Prior to FY 1995		New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrolo Urbano y Ecologia	Research: Demographic Studies, Research: General, Research: Population Surveys	Graduate Student	Ongoing research in the ANimas Mountains through NMDGF. Periodic studies have been conducted in the Sierra San Luis and Peloncillo Mountains
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	8	Determine habitat requirements, including vegetation and associated parameters	Not Started			New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrolo Urbano y Ecologia	Work type not yet selected	Labor type not yet selected	Should be done concurrently with 2.11 & 2.12
New Mexican ridge-nosed rattlesnake (Crotalus willardi obscurus)	3	9	Activity patterns	Not Started			New Mexico Department of Game and Fish, USFWS Regional Office 2, Management, Research and Development, Secretarua de DeSarrolo Urbano y Ecologia	Work type not yet selected	Labor type not yet selected	Setser et. A. 2005 - Foraging